

**Date:** October 26, 2011

**To:** Thomas J. Bonfield, City Manager  
**Through:** Theodore L. Voorhees, Deputy City Manager  
Mark Ahrendsen, Transportation Director  
Ed Venable, Manager of Engineering and Stormwater  
**From:** Dale McKeel, Bicycle and Pedestrian Coordinator  
**Subject:** DurhamWalks! Pedestrian Plan Revised Sidewalk Corridor Rankings and  
Unfunded Sidewalk Construction Priority List

### **Executive Summary**

At its March 21, 2011 meeting, the City Council adopted the following actions to revise and implement the DurhamWalks! Pedestrian Plan: (1) Use a revised ranking methodology for sidewalk corridor projects, (2) Prepare revised rankings based on the new methodology, and (3) Prepare a Sidewalk Construction Priority List for City Council review and adoption. City staff have revised the sidewalk rankings and prepared an Unfunded Sidewalk Construction Priority List for Council review and adoption.

### **Recommendation**

Staff recommends that City Council receive the report and review and adopt the Unfunded Sidewalk Construction Priority List.

### **Background**

At its March 21, 2011 meeting, the City Council adopted the following actions to revise and implement the DurhamWalks! Pedestrian Plan:

1. Use Revised Ranking Methodology. It is recommended that staff use the revised DurhamWalks! ranking methodology that gives greater weight to sidewalk corridors near schools and park / recreation centers.
2. Prepare Revised Rankings. It is recommended that staff, with assistance from the Bicycle and Pedestrian Advisory Commission (BPAC), update the sidewalk corridor rankings using the revised methodology and taking into account changes that have occurred since the DurhamWalks! Plan was adopted in 2006. The changes that will be incorporated into the rankings include completed sidewalks, new schools and parks, changes to the city limits, changes to bus routes, new crash data, etc.
3. Prepare Sidewalk Construction Priority List for City Council Review and Adoption. It is recommended that staff, with assistance from the Bicycle and Pedestrian Advisory Commission, use the revised rankings to prepare a sidewalk construction priority list. This list will be reviewed and adopted by City Council. Sidewalk construction projects will be selected from the list as funds and staff resources are available. The list will

be developed by closely reviewing the sidewalk corridor rankings, but will also consider other factors such as project length, staff resources, funding, unique opportunities, sidewalk petitions, constructability challenges, etc. The list will be updated, reviewed, and adopted by City Council every three to five years.

Over the past few months, staff has spent many hours collecting and compiling the data needed to revise the sidewalk corridor rankings, and has used this data to prepare the Unfunded Sidewalk Construction Priority List.

### **Issues and Analysis**

The DurhamWalks! Plan identified and ranked sidewalk corridor projects. The following factors were used in ranking projects:

- Project type. There are three project types: (1) filling in existing sidewalk gaps in a corridor; (2) new sidewalk on both sides for the entire length of the corridor; (3) new sidewalk on one side of a corridor when there's already a sidewalk on one side.
- Presence of transit (near a bus route).
- Safety need (based on reported vehicle-pedestrian crashes).
- Proximity to schools.
- Road type (arterial, collector, or neighborhood street).
- Compatible land uses (used to suggest potential for sidewalk use).
- Public comments.
- Proximity to parks and recreation centers.
- Proximity to existing or proposed greenway trails.

As requested, the sidewalk corridor projects have been re-ranked by updating pedestrian crash data and giving greater weight to locations near schools and parks / recreation centers. The rankings have also been updated to include schools and parks that have been built since 2006. Several other changes have been made as follows:

1. Eleven corridors have been completed (sidewalks on both sides of the corridor) and were removed.
2. New corridors have been added. For instance, Duke University Road and portions of NC 55 were not included in the original DurhamWalks! Plan.
3. The end points for some projects have been modified to reflect changes that have occurred since 2006. For instance, portions of Geer Street have been added to reflect a new retail area (Wal-Mart, etc.) and bus route.
4. Corridor projects longer than about 1.75 miles were divided into smaller corridor segments, to provide greater consistency in the application of scoring.
5. In the original DurhamWalks! Plan ranking methodology, sidewalk corridors that had a transit route were given 1 point, while other corridors were given 0 points for "presence of transit." At the suggestion of the Bicycle and Pedestrian Advisory Commission, the transit data has been enhanced by taking into account the average number of bus passengers boarding and departing at the bus stops along a corridor (both DATA and Triangle Transit passengers). The corridors with transit service were divided into four quartiles based on passengers in the corridor. The highest quartile

was given 2 points, the next highest 1.5 points, then 1 and 0.5 for the lower ranked quartiles. Corridors without transit service received 0 points.

There are five attachments, as follows:

- **Attachment A** lists the changes that been made to the sidewalk corridor project list. Changes include: (1) corridors that have been removed because there is a complete sidewalk on both sides for the full length of the corridor, (2) new corridor projects, (3) corridor projects that have been split into shorter segments, and (4) corridor projects for which the end points have been changed.
- **Attachment B** illustrates the 2011 sidewalk corridor rankings using the new methodology and updated information. The ranking from 2006 is shown for comparison. The “change in rank” column illustrates the change between 2006 and 2011; a positive number indicates the project ranked higher in 2011 than 2006, while a negative number indicates the project rank is lower in 2011.
- **Attachment C** provides the project status of the top 52 sidewalk corridors – all projects that scored higher than 9. For instance, the “project status” field might indicate that sidewalk has been constructed in the corridor since 2006, that sidewalk will be built as part of a future road widening project, or that funding has been provided for new sidewalk in the corridor.
- **Attachment D** is the Unfunded Sidewalk Construction Priority List. The 24 projects on this list are taken from Attachment C. Sidewalk construction projects will be selected from this list for inclusion in the Capital Improvements Program, Metropolitan Transportation Improvement Program, etc. as funds and staff resources are available and in consideration of other factors such as project length, unique opportunities, sidewalk petitions, and constructability challenges. The list includes the amount of sidewalk that needs to be constructed in the corridor to provide a complete sidewalk on at least one side. Also note the following about this list:
  - a. The list indicates whether there is existing curb and gutter in the corridor. In general, there are fewer difficulties in constructing new sidewalk when curb and gutter is in place. On corridors without existing curb and gutter, the list indicates whether the adopted bike plan calls for bike lanes in the corridor – space for future bike lanes may need to be accounted for in the design of future sidewalks and/or curb and gutter.
  - b. The list includes a “planning level” cost estimate, along with a running total of project costs. These cost estimates are very preliminary in nature; actual costs can be more accurately determined once final design and other engineering tasks are completed. The planning level cost estimate takes into account the length of sidewalk to be constructed, existence of curb and gutter, and recommendations from the bicycle plan, but does not consider other cost factors, such as obstructions, utilities, environmental constraints, or right-of-way.

**Attachment E** is a map illustrating the projects on the Unfunded Construction Priority List.

### **Review by the Bicycle and Pedestrian Advisory Commission**

At its meeting on October 18, 2011, the Durham Bicycle and Pedestrian Advisory Commission received a presentation on the revised ranking methodology and the Unfunded Construction Priority List. In general, BPAC supports the revised ranking methodology and believes it is an improvement over the previous methodology. BPAC had the following comments about specific projects:

1. Broad1 (Main Street to Club Blvd) is not a high priority at this time because there is a complete sidewalk on both sides of Broad Street except for a short section adjacent to Duke's East Campus, where there is an existing walking trail. This project is not on the Unfunded Construction Priority List.
2. HWY 54 PW2 (Alston Avenue to Miami Blvd) is not a high priority at this time because most of the project is outside the City Limits in Research Triangle Park, where the Research Triangle Foundation maintains a trail on one side of the highway. This project is not on the Unfunded Construction Priority List.
3. Three corridors – Holloway A1 (Guthrie to Miami, ranked 58), Liberty2 (Park to Miami, ranked 112), and Old Oxford (Roxboro to Dearborn, ranked 127) – seemed low in the priority rankings based on the level of existing pedestrian activity. However, BPAC does not suggest that these corridors be added to the Unfunded Construction Priority List or that changes be made to the ranking methodology.

### **Financial Impacts**

There is no direct cost associated with receiving this report and adopting the Unfunded Sidewalk Construction List. However, the "planning level" cost estimate for projects on the Unfunded Sidewalk Construction List is nearly \$14 million. In addition, the City Council has accepted several sidewalk petitions and the City's cost to construct these projects is estimated at about \$600,000. Direct sidewalk construction financial impacts will be addressed through the Capital Improvements Program and annual budget process.

### **SDBE**

This item does not require review by the Equal Opportunity Equity Assurance Department. However, the department is involved in reviewing contracts for sidewalk design and construction.